

Serial No. 10/665,108  
June 23, 2004  
Reply to the Office Action dated March 1, 2004  
Page 4 of 7

#### REMARKS/ARGUMENTS

Claims 2-8, 11, 13, and 14 are pending in this application. By this Amendment, Applicants AMEND claims 2-4, 11, 13, and 14 and CANCEL claims 1, 9, 10, and 12.

The Examiner objected to the Drawings for allegedly failing to show every feature of the claims.

The Examiner alleged that the feature of "bases disposed on two outermost flanges of the plurality of flanges" recited in claims 8 and 9 was not shown in the Drawings.

First, Applicants respectfully submit that this feature is recited in claim 7, not claims 8 and 9. Second, Applicants respectfully submit that Applicants' Fig. 1A and 3A shows bases disposed on the two outermost flanges having terminals 3a and 3b disposed thereon. As clearly disclosed in the paragraph bridging pages 4 and 5 of the originally filed Specification, the bases are defined by the portion of the bobbin 2 in which the terminals 3a and 3b are connected.

Second, Applicants have canceled claims 9, 10, and 12. Please note, the feature of "a case accommodating the core" that the Examiner inadvertently indicated as recited in claim 10 is recited in claim 9, and the feature of "the case includes epoxy resin disposed therein" that the Examiner inadvertently indicated as recited in claim 11 is recited in claim 10.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of this objection to the Drawings.

The Examiner objected to claim 11 for allegedly containing a minor informality. Applicants have amended claim 11 to correct the minor informality noted by the Examiner. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection to claim 11.

Claim 12 was rejected under 35 U.S.C. § 112, first paragraph as allegedly as failing to comply with the written description requirement. Applicants have canceled claim 12. Accordingly, Applicants respectfully request reconsideration and withdrawal

Serial No. 10/665,108  
June 23, 2004  
Reply to the Office Action dated March 1, 2004  
Page 5 of 7

of the rejection of claim 12 under 35 U.S.C. § 112, first paragraph.

Claims 1 and 3-6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Honma (U.S. 6,075,431) in view of Godawski (U.S. 5,138,545). Claims 2 and 11-14 were rejected under 35 U.S.C. 103(a) over Honma in view of Godawski as applied to claim 1 above, and further in view of Boesel (U.S. 5,524,334). Claims 7 and 8 were rejected under 35 U.S.C. 103(a) over Honma (US 6,075,431) in view of Godawski (U.S. 5,138,545) as applied to claim 4 above, and further in view of Yeh et al. (U.S. 6,587,026). Claims 9 and 10 were rejected under 35 U.S.C. 103(a) over Honma in view of Godawski as applied to claim 1 above, and further in view of Murai (U.S. 6,154,113). Applicants have cancelled claims 1, 9, 10, and 12. Applicants respectfully traverse the rejections of claims 2-8, 11, 13, and 14.

Claim 13 has been amended to recite:

"A high-voltage transformer comprising:  
a core having a central axis;  
a bobbin having a hole for holding the core and at least three  
winding grooves arrayed along the central axis of the core;  
primary coils wound around outermost winding grooves among said  
at least three winding grooves; and  
a secondary coil wound around a winding groove other than the  
outermost winding grooves, the secondary coil being connected to diodes  
at both ends;  
wherein **the winding grooves near the center of the core are  
deeper than the winding grooves located near both ends of the core.**"  
(emphasis added)

Applicants' claim 13 recites the feature of "the winding grooves near the center of the core are deeper than the winding grooves located near both ends of the core." With the improved features of claim 13, Applicants have been able to provide an inexpensive, compact high-voltage transformer having satisfactory high-voltage output characteristics (see, for example, the last full paragraph on page 2 of the originally filed Specification).

Applicants have amended claim 13 to be in independent form. The Examiner has admitted in paragraph no. 8 on page 5 of the outstanding Office Action that the

Serial No. 10/665,108  
June 23, 2004  
Reply to the Office Action dated March 1, 2004  
Page 6 of 7

combination of Honma and Godawski fails to teach or suggest the feature of "the winding grooves near the center of the core are deeper than the winding grooves located near both ends of the core" as recited in Applicants' claim 13. The Examiner has relied upon Boesel to allegedly cure this deficiency.

Boesel clearly teaches in Figs. 8A-8E that all of the winding grooves are of the same depth, NOT that the winding grooves near the center are deeper than the grooves located near both ends of the core as recited in Applicants' claim 13. Thus, Applicants respectfully submit that Boesel fails to teach or suggest the feature of "the winding grooves near the center of the core are deeper than the winding grooves located near both ends of the core" as recited in Applicants' claim 13.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 13 under 35 U.S.C. 103(a) over Honma in view of Godawski, and further in view of Boesel.

The Examiner has relied upon Yeh et al. and Murai to allegedly cure various deficiencies in the combination of Honma and Godawski. However, neither Yeh et al. nor Murai teaches or suggests the feature of "the winding grooves near the center of the core are deeper than the winding grooves located near both ends of the core" as recited in Applicants' claim 13.

Accordingly, Applicants respectfully submit that Honma, Godawski, Boesel, Yeh et al. and Murai, applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in claim 13 of the present application. Claims 2-8, 11, and 14 depend upon claim 13 and are therefore allowable for at least the reasons that claim 13 is allowable.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicants petition the Commissioner for a ONE-month extension of time, extending to July 1, 2004, the period for response to the Office Action

Serial No. 10/665,108  
June 23, 2004  
Reply to the Office Action dated March 1, 2004  
Page 7 of 7

dated March 1, 2004.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: June 23, 2004

  
Attorneys for Applicants

Joseph R. Keating  
Registration No. 37,368

Christopher A. Bennett  
Registration No. 46,710

**KEATING & BENNETT LLP**  
10400 Eaton Place, Suite 312  
Fairfax, VA 22030  
Telephone: (703) 385-5200  
Facsimile: (703) 385-5080